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CLAIMS 1 – 15 (CANCELLED)

16. (new) A position measuring device, comprising:

a code comprising a first code element and a second code element arranged one behind the other in a measuring direction, wherein each of said first and second code elements comprises a first partial area and a second partial area, which are complementary to each other and are arranged sequentially in said measuring direction;

a scanning device comprising a plurality of detector elements that scan said first and second code elements and for forming a first scanning signal within said first partial area of said first code element and a second scanning signal within said second partial area of said first code element; and

an evaluation unit comprising a comparison device, which compares said first scanning signal with said second scanning signal and forms binary information for said first code element as a function of said comparison.

17. (new) The position measuring device in accordance with claim 16, wherein said comparison device forms a difference between said first scanning signal and said second scanning signal.

18. (new) The position measuring device in accordance with claim 16, wherein said first and second scanning signals are each conducted to said comparison device, and said evaluation unit comprises a control unit, which is designed to assure that said binary information is respectively formed from said first and second partial areas of said first code element.

19. (new) The position measuring device in accordance with claim 17, wherein said first and second scanning signals are each conducted to said comparison device, and said evaluation unit comprises a control unit, which is designed to assure that said binary information is respectively formed from said first and second partial areas of said first code element.

20. (new) The position measuring device in accordance with claim 18, further comprising a track arranged parallel with said code, wherein information of said track is supplied to said control unit, and wherein on the basis of said information of said track said first and second scanning signals are selected for forming said binary information.

21. (new) The position measuring device in accordance with claim 20, wherein said information track is a periodic incremental graduation.

22. (new) The position measuring device in accordance with claim 17, wherein said evaluation unit comprises an error check device, which is designed for comparing said difference between said first and second scanning signals with a nominal difference and, in case of said difference falling below said nominal difference said error check device outputs an error signal.

23. (new) The position measuring device in accordance with claim 16, wherein said first and second partial areas have optical properties which are complementary to each other.

24. (new) The position measuring device in accordance with claim 16, wherein said plurality of detector elements are arranged in said measuring direction at distances corresponding to half a length of said first partial areas of said first and second code elements, and respectively two of said plurality of detector elements are arranged at a mutual distance corresponding to said length of a partial area and are differentially connected.

25. (new) A method for absolute position measuring, comprising:

scanning a code comprising a first code element and a second code element arranged one behind the other in a measuring direction, wherein each of said first and second code elements comprises a first partial area and a second partial area, which are complementary with respect to each other and are arranged following each other in said measuring direction;

generating a first scanning signal within said first partial area of said first code element and a second scanning signal within said second partial area of said first code element;

comparing said first and second scanning signals with each other; and

forming binary information from said comparing.

26. (new) The method in accordance with claim 25, wherein said comparing comprises forming a difference of said first and second scanning signals.

27. (new) The method in accordance with claim 25, wherein said first and second partial areas of said first code element are immediately successive;

said method further comprising selecting said first and second scanning signals.

28. (new) The method in accordance with claim 26, wherein said first and second partial areas of said first code element are immediately successive;

said method further comprising selecting said first and second scanning signals.

29. (new) The method in accordance with claim 27, wherein said selecting takes place via a control signal obtained by scanning at least one information track.

30. (new) The method in accordance with claim 26, wherein said difference is compared with a nominal difference, and forming an error signal in case said difference falls below said nominal difference.

31. (new) The method in accordance with claim 25, wherein said plurality of detector elements are arranged in said measuring direction at distances corresponding to half a length of said first partial areas of said first and second code elements, and wherein said difference is formed from two of said plurality of detector elements which are arranged at a mutual distance from each other corresponding to said length of said first partial areas of said first and second code elements.

32. (new) The method in accordance with claim 31, wherein said difference is compared with a nominal difference; and

forming an error signal when said difference falls below said nominal difference; and

said binary information is selected in a pattern corresponding to a length of said first code element for forming the code word CW, whose sequence generates the least errors.